

A

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C

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E

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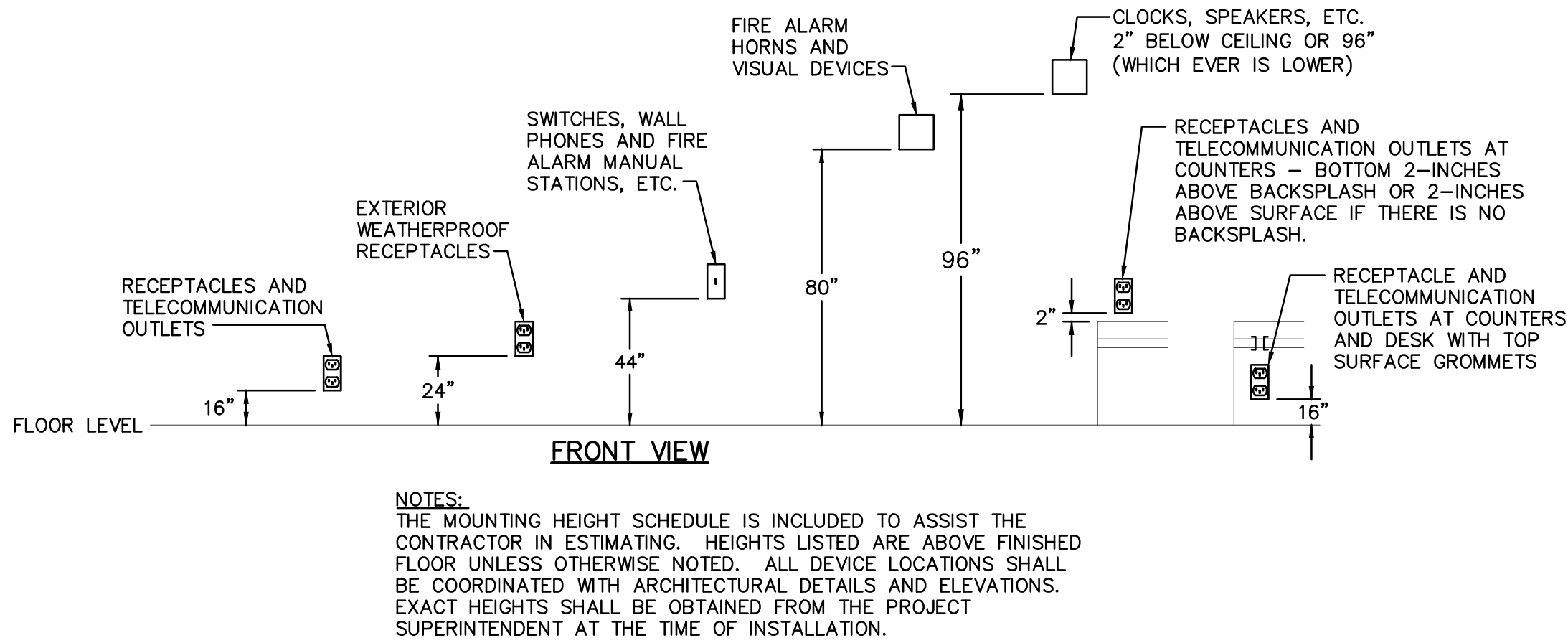
E

F

ELECTRICAL SYMBOLS LEGEND	
SWITCHES	
	S <sub>0</sub> SINGLE POLE SWITCH, LETTER INDICATES SWITCH LEG, 'K' INDICATES KEY TYPE, 'P' INDICATES PILOT
	S <sub>D</sub> DIMMER SWITCH
	HO OCCUPANCY SENSOR - WALL MOUNTED
LIGHTING	
	FLUORESCENT CEILING LUMINAIRE
	WALL MOUNTED LUMINAIRE
	EMERGENCY BATTERY PACK
POWER	
	DUPLEX RECEPTACLE
	MULTI-OUTLET ASSEMBLY
	LIGHTING & APPLIANCE PANELBOARD
	JUNCTION BOX
FIRE ALARM	
	FIRE ALARM MANUAL STATION
	FIRE ALARM AUDIBLE/VISUAL UNIT
TELECOMMUNICATION	
	DATA OUTLET
	NUMBER BY SYMBOL INDICATES QUANTITY OF JACKS. THE NUMBER ZERO INDICATES EMPTY OUTLET BOX, BLANK PLATE AND CONDUIT.
ABBREVIATIONS	
C	CEILING MOUNTED
G	GROUND-FAULT - CIRCUIT INTERRUPTER DEVICE
WP	WHEATHER-PROOF
MISCELLANEOUS	
	J-BOX AT WALL WITH FLEXIBLE RACEWAY EXTENDED FROM WALL - POWER
	J-BOX AT WALL WITH DATA CABLE EXTENDED FROM WALL
	HOME RUN TO PANEL
	ELECTRICAL CIRCUIT
	UNSWITCHED LIGHTING CIRCUIT
	GENERAL ELECTRICAL KEYNOTE - SEE CORRESPONDING NOTES
	MECHANICAL EQUIPMENT WITH ELECTRICAL CONNECTION, SEE MECHANICAL / ELECTRICAL COORDINATION SCHEDULE

### GENERAL ELECTRICAL NOTES

- ALL CONDUITS IN NEW WALLS, EXISTING STUD WALLS, OR IN AREAS WITH SUSPENDED CEILINGS SHALL BE INSTALLED CONCEALED.
- BRANCH CIRCUIT AND SPECIAL SYSTEMS WIRING FOR DEVICES ON EXISTING WALLS OR EXPOSED CEILINGS WHERE RACEWAY CANNOT BE CONCEALED SHALL BE INSTALLED IN SURFACE METAL RACEWAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING, PAINTING, REPAIRING OR REPLACEMENT OF ALL WALLS, CEILINGS, OR OTHER BUILDING ELEMENTS WHICH ARE DISTURBED AS PART OF THE DEMOLITION OR INSTALLATION OF ELECTRICAL WORK.
- REFER TO MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- A CABLE OR RACEWAY TYPE WIRING METHOD, INSTALLED IN EXPOSED OR CONCEALED LOCATIONS NEAR METAL-CORRUGATED SHEET ROOF DECKING, SHALL BE INSTALLED AND SUPPORTED SO THE NEAREST OUTER SURFACE OF THE CABLE OR RACEWAY IS NOT LESS THAN 6 INCHES FROM THE NEAREST SURFACE OF THE ROOF DECKING. EXCEPTION: RIGID METAL CONDUIT AND INTERMEDIATE METAL CONDUIT SHALL NOT BE REQUIRED TO MAINTAIN THIS CLEARANCE.
- LABELING FOR PANELBOARD DIRECTORIES, FIRE ALARM PANEL PROGRAMMING, ETC. SHALL USE ROOM NUMBERS ASSIGNED BY OWNER AND NOT ROOM NUMBERS LISTED ON DRAWINGS. LABELS ON PANELBOARD DIRECTORY SHALL INCLUDE A DESCRIPTION OF LOAD SUCH AS LIGHTS, RECEPTACLES, MECHANICAL UNIT LOCATIONS, ETC.
- KEYNOTES FOR OCCUPANCY SENSORS SHOWN ON THE DRAWINGS INDICATE ONLY THE ROOM/AREA TO BE CONTROLLED BY THE SENSORS. PROVIDE SENSORS AND RELATED EQUIPMENT AS REQUIRED FOR COMPLETE COVERAGE AND SWITCHING ARRANGEMENTS AS SHOWN ON DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- MULTIWIRE BRANCH CIRCUITS AS DEFINED BY THE NATIONAL ELECTRICAL CODE (CIRCUITS WITH COMMON NEUTRAL) SHALL NOT BE USED. EXCEPTION: WHERE AN EQUIPMENT MANUFACTURER REQUIRES A MULTIWIRE BRANCH CIRCUIT FOR ONLY ONE UTILIZATION EQUIPMENT AND WHERE ALL UNGROUNDED CONDUCTORS OF THAT CIRCUIT ARE OPENED SIMULTANEOUSLY BY THE BRANCH CIRCUIT OVERCURRENT DEVICE.
- CONNECT ALL EXIT LIGHT FIXTURES AND EMERGENCY BATTERY UNIT FIXTURES TO NEAREST UNSWITCHED NORMAL LIGHTING CIRCUIT SERVING CORRESPONDING AREA.
- THE SPECIFICATIONS LIST ACCEPTABLE WIRING METHODS AND MATERIALS. OTHER WIRING METHODS AND MATERIALS NOT LISTED IN THE SPECIFICATIONS (SUCH AS MC CABLE, ETC.) ARE NOT ACCEPTABLE.



1 TYPICAL ELECTRICAL DEVICE MOUNTING HEIGHT  
NOT TO SCALE

LUMINAIRE SCHEDULE								
MARK	MANUFACTURER	CATALOG NO.	LAMPS QTY TYPE	FINISH	DESCRIPTION	REMARKS	ACCEPTABLE MANUFACTURERS	
B	WILLIAMS	50G-S24-232-RA12125-EB2	2 F032/ T-8	WHITE	RECESSED LENSED TROFFER	4	REMARK 1	
CD	WILLIAMS	DIG-S24-332-AD	3 F032/ T-8	WHITE	RECESSED DIRECT/INDIRECT - DIMMING BALLAST	4, 5	REMARK 1	
E	DUAL-LITE	LZ20	2 10W	WHITE	DESIGNER EMERGENCY LIGHT - HALOGEN LAMPS		REMARK 2	
EA	DUAL-LITE	PG-Z-HTR	- LED	DARK BRONZE	EMERGENCY LIGHT - EXTERIOR		REMARK 2	
X	DUAL-LITE	SESrWE	- LED	WHITE	EXIT LIGHT	3	REMARK 2	

REMARKS:

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR LUMINAIRES, LAMPS AND BALLASTS.

- COLUMBIA, DAY-BRITE, LITHONIA, LIGHTOLIER AND METALUX ARE ACCEPTABLE MANUFACTURERS FOR FIXTURE TYPE INDICATED.
- LIGHTALARMS, CHLORIDE, EMERGI-LITE, HUBBELL, INFINITY, LITHONIA, MCPILBEN AND SURE-LITES ARE ACCEPTABLE MANUFACTURERS FOR FIXTURE TYPE INDICATED.
- REFER TO DRAWINGS FOR MOUNTING REQUIREMENTS SUCH AS WALL MOUNT, END MOUNT, CEILING MOUNT AND PROVIDE FIXTURES ACCORDINGLY. PROVIDE DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS.
- VERIFY LAMP COLOR OF EXISTING FIXTURES AND MATCH.
- PROVIDE WITH ADVANCE MARK 10 DIMMING BALLAST.

MECHANICAL / ELECTRICAL COORDINATION SCHEDULE														
ABBREVIATIONS:														
FLA	FULL LOAD AMPS	C	COMBINATION STARTER AND SAFETY SWITCH	2S	TWO SPEED	N1	NEMA 1							
HP	HORSEPOWER	3S	THREE SPEED	N3R	NEMA 3R									
KW	KILOWATTS	CB	CIRCUIT BREAKER	FV	FULL VOLTAGE	N4X	NEMA 4X							
PH	PHASE	SH	HP RATED SWITCH	NR	NON-REVERSING									
V	VOLTAGE	SS	SAFETY SWITCH	RE	REVERSING									
E	ELECTRICAL CONTRACTOR	MR	PER MANUFACTURER'S RECOMMENDATIONS	RV	REDUCED VOLTAGE									
I	INTEGRAL WITH EQUIPMENT	NF	NON-FUSED	VFC	VARIABLE FREQUENCY									
M	MECHANICAL CONTRACTOR													
EQUIPMENT			ELECTRICAL SYSTEM			DISCONNECT				CONTROLLER				REMARKS
ID	DESCRIPTION	LOAD	V	PH	PANEL - CIRCUIT	FURNISH/ INSTALL BY	TYPE	RATING (AMPS)	FUSE SIZE	ENCL.	FURNISH/ INSTALL BY	TYPE/ NEMA SIZE	ENCL.	
DS-1A	DUCTLESS SPLIT SYSTEM (INDOOR UNIT)	1.3 FLA	208	1	TR-19	E/E	SH	20	MR	N1	M/M	-	-	
DS-1B	DUCTLESS SPLIT SYSTEM (OUTDOOR UNIT)	22.5 FLA	208	1	TR-23	E/E	SS	60	MR	N3R	M/M	-	-	
DS-2A	DUCTLESS SPLIT SYSTEM (INDOOR UNIT)	1.3 FLA	208	1	TR-27	E/E	SH	20	MR	N1	M/M	-	-	
DS-2B	DUCTLESS SPLIT SYSTEM (OUTDOOR UNIT)	22.5 FLA	208	1	TR-31	E/E	SS	60	MR	N3R	M/M	-	-	
DS-3A	DUCTLESS SPLIT SYSTEM (INDOOR UNIT)	1.2 FLA	208	1	TR-26	E/E	SH	20	MR	N1	M/M	-	-	
DS-3B	DUCTLESS SPLIT SYSTEM (OUTDOOR UNIT)	15 FLA	208	1	TR-30	E/E	SS	30	MR	N3R	M/M	-	-	

GENERAL NOTES:

- CONTRACTOR SHALL VERIFY/COORDINATE ALL RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE RATINGS ARE OTHER THAN AS NOTED ON MECHANICAL/ELECTRICAL COORDINATION SCHEDULE, DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS NOTED SHALL BE RESPONSIBLE FOR ALL COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED EQUIPMENT.
- ALL FRACTIONAL HORSEPOWER MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.
- HORSEPOWER RATED SWITCHES (SH): FOR 120 V MOTORS LESS THAN 1/2 HP, PROVIDE FUSEHOLDER WITH SWITCH, FUSED PER MANUFACTURER'S RECOMMENDATION AND NEC REQUIREMENTS. FOR 208 VOLT 1-PHASE MOTORS LESS THAN 3/4 HP PROVIDE FUSE HOLDER WITH DOUBLE-POLE SWITCH THAT OPENS BOTH CONDUCTORS OF THE CIRCUIT. RATING OF FUSES SHALL NOT EXCEED 15 AMPS. FOR 120 V MOTORS RATED 1/2 HP OR 3/4 HP, PROVIDE HP RATED TOGGLE SWITCH (WHERE BRANCH CIRCUIT OVERCURRENT DEVICE MEETS NEC REQUIREMENTS FOR SHORT-CIRCUIT PROTECTION) OR FUSED SAFETY SWITCH.
- ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT TO EQUIPMENT AS INDICATED.

PANEL TR												
208/120 VOLT, 3 PHASE, 4 WIRE				FLUSH MOUNTED								
125 AMP M.L.O.												
AIC: 10000 AMPS SYM												
INTEGRAL TVSS												
CCT NO	LOAD DESCRIPTION	LOAD V.A.	REMARKS	P	AMP SIZE	Ø	AMP SIZE	P	REMARKS	LOAD V.A.	LOAD DESCRIPTION	CCT NO
1	PREP ROOM 215, LTG.	200		1	20	A	20	1		1500	TRAINING ROOM 216, LTG.	2
3	TRAINING ROOM 216, RECEPT.	800		1	20	B	20	1		200	OFFICE 214, RECEPT.	4
5	TRAINING ROOM 216, RECEPT.	800		1	20	C	20	1		1500	PREP ROOM 215, COPIER	6
7	TRAINING ROOM 216, RECEPT.	800		1	20	A	20	1		400	PREP ROOM 215, RECEPT.	8
9	TRAINING ROOM 216, RECEPT.	800		1	20	B	20	1		800	PREP ROOM 215, A/V	10
11	SPARE			1	20	C	20	1		400	TRAINING ROOM 216, RECEPT.	12
13	SPARE			1	20	A	20	1		800	TRAINING ROOM 216, RECEPT.	14
15	SPARE			1	20	B	20	1		800	TRAINING ROOM 216, RECEPT.	16
17	SPARE			1	20	C	20	1		800	TRAINING ROOM 216, RECEPT.	18
19	DS-1A	270		2	15	A	20	1		800	TRAINING ROOM 216, RECEPT.	20
21	-	-		-	-	B	20	1		400	TRAINING ROOM 216, RECEPT.	22
23	DS-1B	4680	a	2	40	C	20	1		200	TRAINING ROOM 216, RECEPT.	24
25	-	-		-	-	A	15	2		250	DS-3A	26
27	DS-2A	270		2	15	B	-	-		-	-	28
29	-	-		-	-	C	30	2	b	3120	DS-3B	30
31	DS-2B	4680	a	2	40	A	-	-		-	-	32
33	-	-		-	-	B	20	1		400	EXTERIOR RECEPT.	34
35	SPARE			1	20	C	20	1			SPARE	36
37	SPACE ONLY					A					SPACE ONLY	38
39	SPACE ONLY					B					SPACE ONLY	40
41	SPACE ONLY					C					SPACE ONLY	42

REMARKS:

- PROVIDE 2-#8, 1-#10 GRD, 3/4" C.
- PROVIDE 2-#10, 1-#10 GRD, 3/4" C.

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